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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,093	02/03/2006	Mitsuru Naito	OGW-0416	4635
7590 Patrick G. Burns Greer, Burns & Crain, Ltd. Suite 2500 300 South Wacker Drive Chicago, IL 60606			EXAMINER FISCHER, JUSTIN R	
			ART UNIT	PAPER NUMBER
			1791	
			MAIL DATE	DELIVERY MODE
			11/10/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/567,093

**Applicant(s)**

NAITO, MITSURU

**Examiner**

Justin R. Fischer

**Art Unit**

1791

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 and 7-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 23, 2009 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glinz (US 6,463,976, newly cited) and further in view of Conger (US 4,036,765, newly cited) and French (US 3,913,654, of record). As best depicted in Figures 1-4, Glinz teaches a runflat tire construction comprising a runflat insert defined by a pair of rings and an annular shell. It is further evident from the figures that said annular shell comprises two apexes. The reference, however, is silent with respect to the inclusion of a retention groove on an inner peripheral surface of said tire.

Conger, on the other hand, is broadly directed to runflat tire constructions and teaches the inclusion of a lubricant layer on an inner peripheral surface of the tire in

order to eliminate heat buildup commonly experienced in an underinflated condition (when runflat support member contacts tire inner surface). One of ordinary skill in the art at the time of the invention would have found it obvious to include such a lubricant layer in the runflat tire of Glinz for the aforementioned benefits. Additionally, while Conger fails to arrange such a lubricant layer within a retention groove, French recognizes the known use of such retention grooves with lubricant layers. In essence, French recognizes an alternative manner in which lubricant layers are commonly provided on a tire inner surface and applicant has not provided a conclusive showing of unexpected results to establish a criticality for the claimed arrangement. Thus, one of ordinary skill in the art at the time of the invention would have found it obvious to use retention grooves in the wheel assembly of Glinz in view of Conger.

Lastly, regarding independent claim 1, modern tires are conventionally described as including an inner liner and at least one carcass ply. In the instance where a single carcass ply is provided, such a layer constitutes the claimed "carcass ply" and the innerliner layer can be viewed as the claimed "reinforcement rubber layer" arranged between the retention grooves and the carcass layer.

Regarding claims 2 and 3, Figures 1-7 of French suggest that the reference is directed to a plurality of embodiments in which the retention grooves have a wide variety of dimensions (depth and width). It is further noted that the claims require absolute dimensions and it is well recognized that tire dimensions are directly related to the type of tire (and thus the tire size- tire components are generally larger in larger tires). Thus, one of ordinary skill in the art at the time of the invention would have found

it obvious to form the retention grooves of French in accordance to the claimed invention absent any conclusive showing of unexpected results.

With respect to claims 4 and 5, as noted above, conventional tire assemblies include at least one carcass ply. In the instance where two carcass plies are provided, an innermost carcass ply can be viewed as a fiber reinforced layer that is sandwiched between a bottom of the retention groove and an outermost carcass ("a carcass ply" as defined by the claimed invention). Furthermore, such carcass plies are formed with either a biased or radial construction (satisfies claimed range between 45 and 90 degrees with respect to the circumferential direction of the tire). It is emphasized that the claims as currently drafted fail to exclude an innermost carcass ply from being viewed as the claimed fiber reinforced layer.

As to claim 7, the retention grooves of French can be discontinuous in the circumferential direction of the tire (e.g. Figure 7 and Column 3).

Regarding claims 8 and 9, ribs 7 are seen to constitute the claimed "salient portions" that extend in the circumferential direction of the tire (Figure 3 and Column 2, Lines 55+).

#### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1-5 and 7-9 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R. Fischer** whose telephone number is **(571) 272-1215**. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Justin Fischer  
/Justin R Fischer/  
Primary Examiner, Art Unit 1791  
November 6, 2009